MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 3, 2021/2022

DCS5144 – INTRODUCTION TO INFORMATION SYSTEMS

(All sections/Groups)

10 AUGUST 2022
9.00 a.m. – 11.00 a.m.
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of 8 pages with 2 sections.
2. Attempt **ALL** questions in Section A and Section B. The distribution of the marks for each question is given.
3. Please write all your answers for Section A on the OMR form provided and all answers for Section B in the Answer Booklet provided.

SECTION A: Multiple Choice Questions (30 Marks)

1. Information systems can be best described as _____.
   A. software agents that use built-in or learned knowledge to perform repetitive tasks.
   B. a set of computer peripherals attached to the computer
   C. a computerised network used to collect, store, process, analyse and distribute data to support decisions making and improve efficiency.
   D. a series of computer codes designed to get data from the user.

2. The total number of students with "Distinction" status for each program is an example of _____.
   A. information
   B. data
   C. feedback
   D. result

3. The options below are the responsibilities of managers in an organisation, **EXCEPT**:
   A. Create new products and serviced.
   B. Allocate financial and human resources.
   C. Set the organisational strategies to respond to business challenges.
   D. Design and build new information systems.

4. Private intranets known as _____ gives access to firms outside of the organisation to coordinate activities and collaborate with other interorganisational work.
   A. internet
   B. extranets
   C. World Wide Web
   D. metronets

5. The _____ department is responsible to attract customers, sell the products, and keep track of after-sales issues.
   A. human resource
   B. finance and accounting
   C. manufacturing and production
   D. sales and marketing

6. New developments and changes in technology is part of the _____.
   A. basic business environment
   B. immediate business environment
   C. global business environment
   D. current business environment

Continued ...

7. _____ integrates business processes in manufacturing and production, finance and accounting, sales and marketing, and human resources into a single software system.
   A. Enterprise System
   B. Customer Relationship Management Systems
   C. Supply Chain Management Systems
   D. Knowledge Management Systems

8. The *E-Filing* system provided by *Lembaga Hasil Dalam Negeri* is an example of _____.
   A. social commerce
   B. e-government
   C. e-business
   D. m-commerce

9. Businesses that do better than others such as having superior resources are said to have _____.
   A. better financial capabilities
   B. more business transparencies
   C. more disciplined employees
   D. a competitive advantage

10. If you have a business that focuses on selling only vegan based health products, you are using the _____ strategy.
   A. market transparency
   B. mass customisation
   C. market niche
   D. product differentiation

11. When a t-shirt designer features her merchandise inside a clothing boutique, _____ are created.
   A. synergies
   B. benchmarks
   C. virtual economics
   D. bargaining power

12. Which of the following statements is **FALSE** about business process management (BPM)?
   A. It is a continuous approach to improve business processes.
   B. BPM uses a variety of tools and methodologies to understand existing processes, design new processes, and optimise those processes.
   C. New information systems or enhancements to existing systems may have to be implemented to support the redesigned process.
   D. After the processes have been implemented and optimised, continuous monitoring or making adjustments to the processes are not required.

Continued ...

13. The following are business-to-consumer e-commerce websites, **EXCEPT**:
    A. Watsons
    B. eBay
    C. Dell
    D. GoShop

14. Information _____ refers to the complexity and content of messages by integration of videos, audios and text to enhance consumers' shopping experience.
    A. ubiquity
    B. personalisation
    C. uniqueness
    D. richness

15. "*When Michael plans to sell his car, he will have more information about the car than the potential buyer*". This is an example of information _____.
    A. complexity
    B. discrimination
    C. asymmetry
    D. transparency

16. Office 365 is an example of _____.
    A. service provider
    B. market creator
    C. community provider
    D. transaction broker

17. Senior executives face many _____ decision situations, such as planning the firm's five-year or ten-year goals or deciding new markets to enter.
    A. structured
    B. unstructured
    C. verbal
    D. procedural

18. The list below are examples of intelligent agents that are able to respond to human voice commands, **EXCEPT**:
    A. Google Assistant
    B. Apple's Siri
    C. Microsoft Teams
    D. Amazon's Alexa

19. _____ are the measures proposed by senior management for understanding how well the firm is performing along any given dimension.
    A. Value web
    B. Flowcharts
    C. Benchmarking
    D. Key Performance Index

Continued ...

20. _____ can help a clothing store owner push smartphone alerts about special sales and discounts to nearby potential customers.
    A. Location analytics
    B. Pivot table
    C. Robotics
    D. Neural Networks

21. A _____ is a proposal to management seeking approval for an investment.
    A. business rule
    B. prototype
    C. balance score card
    D. business case

22. The following are tangible benefits of information systems, **EXCEPT**:
    A. Increased profits
    B. Reduced maintenance cost
    C. Improved customer satisfaction
    D. Decreased hardware cost

23. "Defining and understand the problem" is the _____ step in developing a new information system.
    A. first
    B. second
    C. third
    D. fourth

24. RAD, JAD and Agile all focuses on _____.
    A. increasing the traffic flow for a specific online platform.
    B. increasing the user friendliness of a mobile app.
    C. designing beautiful website interfaces.
    D. creating workable information systems in a very short period of time.

25. A person who gains access to an information system illegally is a _____.
    A. spy
    B. hacker
    C. virus
    D. zombie

26. Encryption _____.
    A. is used to remove viruses from the computer system.
    B. enables the computer system to access web application fast.
    C. is the method by which information is converted into secret codes that hides the true meaning of the information.
    D. allows a person to access a private network by keying in the correct username and password.

Continued ...

27. The following are examples of biometrics authentication methods, **EXCEPT**:
    A. Thumb print
    B. Voice recognition
    C. Facial recognition
    D. Smartcard

28. Secretly making unauthorised copies and distribution of a movie is a _____ infringement.
    A. copyright
    B. patent
    C. trademark
    D. trade secret

29. Incognito mode _____.
    A. let's you download the latest version of the operating system.
    B. will detect other users that are present at a specific online platform.
    C. is an online privacy feature that prevents your browsing history from being stored.
    D. allows a user to easily get access to user accounts without having to log-in.

30. "*Avoid actions that have extremely high failure costs and focus on reducing the probability of accidents occurring.*" refers to which of the following ethical principles?
    A. Ethical "No Free Lunch" Rule
    B. Risk Aversion Principle
    C. Utilitarian principle
    D. Immanuel Kant's Categorical Imperative

(Total: 30 marks)

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SECTION B: Structured Questions (70 Marks)

QUESTION 1

(a) Briefly describe **FIVE (5)** benefits of using information systems in a business. (5 marks)

(b) List and briefly explain the **THREE (3)** steps in an information system which transforms raw data into information. (6 marks)

(c) Information systems has opened the door for business to collaborate with others whether it is internal or external to the organisation. List and explain the usage of any **THREE (3)** collaborative tools an organisation uses. Give an example for each of the tools explained. (9 marks)

(Total: 20 marks)

QUESTION 2

(a) Define "disruptive technology". Explain **THREE (3)** examples of disruptive technology seen today. (8 marks)

(b) A music file, a PDF manual or an e-book are examples of digital products. Briefly describe **FOUR (4)** advantages of selling digital products online. (4 marks)

(c) List and explain any **FOUR (4)** revenue models that are used by e-commerce companies. (8 marks)

(Total: 20 marks)

QUESTION 3

(a) What is Artificial Intelligence (AI)? Explain **TWO (2)** examples or scenarios where AI is being used in businesses today. (3 marks)

(b) Generally, decision making goes through a four-step process. List and explain each step of this process. (8 marks)

(c) Prototype is one of the alternative methods for building information systems. Draw the flowchart showing the steps involved in developing an information system using the prototype method. (9 marks)

(Total: 20 marks)

Continued ...

QUESTION 4

(a) Data protection and security is very important in an organisation. List **FOUR (4)** ways or methods to protect and make information systems secure. (4 marks)

(b) Explain **THREE (3)** ways online privacy can be invaded when users browse the Internet. (6 marks)

(Total: 10 marks)

End of Paper